

## **Wallace County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/14/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 9 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Wallace County economy.<sup>1</sup>

These 9 sectors have a total direct output of approximately **\$86.9 million** and support **305 jobs** in Wallace County. Running the model for all 9 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Wallace County Economy									
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product			
Direct Effect	304.7	27.09%	\$18,537,343	29.14%	\$86,943,005	136.69%			
Indirect Effect	168.8	15.01%	\$8,454,336	13.29%	\$13,453,114	21.15%			
Induced Effect	38.4	3.41%	\$2,530,664	3.98%	\$4,604,864	7.24%			
Total Effect	511.9	45.50%	\$29,522,342	46.41%	\$105,000,984	165.08%			

As shown in the above table, agriculture, food, and food processing sectors support **512 jobs**, or **45.50%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$105.0** million, roughly **165.08%** of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 9 agriculture, food, and food processing sectors is approximately \$29.5 million, or 46.41% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 46.41% of the total economy.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

 $<sup>5 \</sup>text{ Output} = \text{intermediate inputs} + \text{value added}.$ 

In the top ten agriculture, food, and food processing sectors by employment, the support activities for agriculture and forestry sector is the top employer with **113 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Wallace County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Support activities for agriculture and forestry	112.9	\$5,628,338		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	112.1	\$18,352,078		
Grain farming	107.4	\$53,770,490		
Animal production, except cattle and poultry and eggs	75.7	\$12,204,421		
Wholesale trade	19.5	\$4,282,723		
Accounting, tax preparation, bookkeeping, and payroll services	9.6	\$321,574		
Real estate	8.2	\$1,032,278		
All other crop farming	7.3	\$747,049		
Securities and commodity contracts intermediation and brokerage	7.0	\$380,408		
All other food and drinking places	5.1	\$127,645		

The grain farming sector directly contributes approximately \$53.8 million to the Wallace County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output					
Sector	Total Employment	Total Output			
Grain farming	107.4	\$53,770,490			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	112.1	\$18,352,078			
Animal production, except cattle and poultry and eggs	75.7	\$12,204,421			
Support activities for agriculture and forestry	112.9	\$5,628,338			
Wholesale trade	19.5	\$4,282,723			
Owner-occupied dwellings	0.0	\$1,796,417			
Real estate	8.2	\$1,032,278			
Nitrogenous fertilizer manufacturing	0.7	\$882,200			
Oilseed farming	0.6	\$791,658			
All other crop farming	7.3	\$747,049			

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Wallace County economy.

All Agriculture, Food, and Food Processing Sectors					
Sector	Total Employment	Total Output			
Oilseed farming	0.6	\$791,657.82			
Grain farming	107.4	\$53,770,489.63			
Vegetable and melon farming	0.7	\$147,294.97			
All other crop farming	7.3	\$747,048.75			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	112.1	\$18,352,078.33			
Poultry and egg production	0.0	\$13,835.84			
Animal production, except cattle and poultry and eggs	75.7	\$12,204,420.66			
Bread and bakery product, except frozen, manufacturing	0.3	\$33,978.90			
Nitrogenous fertilizer manufacturing	0.7	\$882,200.42			

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Wallace County, the retail sector was omitted.